February 4, 2006

HEADWATERS – Comprehensive Water Resource Planning for the 18 Western States

AUTHORITY: The FY06 Energy and Water Development Appropriations Act (PL 109-103) directs the Secretary to conduct, "at full federal expense, comprehensive analyses that examine multi-jurisdictional use and management of water resources on a watershed or regional scale."

A Tri-MSC Study Proposal for Integrated Multi-Purpose/Multi-Partner Planning to Improve the Quality and Effectiveness of Water Resource Management in the West.

Under that authority and at the request of the HQUSACE Planning Community of Practice, this proposal was prepared jointly by the three western MSCs (NWD, SPD and SWD) whose AOR covers all three major western watersheds: the Columbia River, the Colorado River, and the Missouri River, in addition to numerous other significant watersheds throughout the western states.

With the Western States Water Council (WSWC) as a proponent, this proposal was prepared and is respectfully submitted as the Corps' collaborative effort to support the vision, goals and objectives and current action plan of the WSWC, the Western Governor's Association (WGA), Western State Water Managers and the citizens that they serve.

In preparing this proposal the writers gave special attention and consideration to each of the required proposal elements and structured this report to demonstrate the unique opportunity to partner, both vertically and horizontally, with those who are responsible to set the vision, tone, priorities and direction of western water resource management from the headwaters to the oceans.

It is also important to note that the writers of this proposal realize that although other proposals are simultaneously moving forward to HQUSACE for consideration, we feel that this study would embody most if not all Corps mission related water resource challenges and priorities for the entire Western United States, albeit at a more strategic and policy-driven level.

BACKGROUND: In 1965, as a result of changing water demands in the West, the WGA adopted a resolution to create the WSWC. The purposes of the WSWC are to:

1. Accomplish effective cooperation among western states in the conservation, development and management of water resources;
2. Maintain vital state prerogatives, while identifying ways to accommodate legitimate federal interests;
3. Provide a forum for the exchange of views, perspectives, and experiences among member states; and
4. Provide analysis of federal and state developments in order to assist member states in evaluating impacts of federal laws and programs and the effectiveness of state laws and policies.

With the Corps having a long standing relationship with western water managers and issues, the WSWC hired its first Executive Director, Wright Hiatt, a retired colonel in the U.S. Army Corps of Engineers. A year or so later, the WSWC assessed their direction and activities. From that time forward the WSWC has maintained a strong collaborative focus

on the purposes stated above. With a very proactive Executive Staff, the WSWC now covers a broad spectrum of water resource challenges facing the West. Recently, the WGA directed the WSWC to prepare analysis and policy options for the sustainable development and use of water within the context of growing and competing demands (e.g., population growth, environmental needs, and historic Indian water rights claims), during an era of fully allocated basins and with the likelihood of increasing climate-caused disruptions. Referred to as the "Action Plan for Western States" this plan will:

1. Examine the role of western states' water policy and management relative to sustainable population growth and development, including a state by state summary of current ground and surface water supplies and anticipated future demands.
2. Analyze state needs and identify strategies to meet future demands, including conservation, water transfers, reductions in agricultural use, desalinization, weather modification, and surface and groundwater storage.
3. Develop options for addressing the water infrastructure needs of the West, including rehabilitation and maintenance of existing Federal dams and conveyance structures, data collection facilities, and non-federal projects, provision of drinking water for urban and rural communities, and construction of waste water treatment facilities consistent with CWA requirements.
4. Identify means to resolve Indian water right claims in ways that provide water to Tribes while minimizing disruption to existing non-Indian uses.
5. Describe potential ramifications of climate variability on western water resources, and develop recommendations to assist states in preparing for these impacts, including drought preparedness, flood control, and data collection.
6. Working with representatives of the federal implementing agencies, develop a protocol for improving coordination and cooperation in protecting aquatic species under the ESA within the framework of state water laws

The draft for this plan is currently being crafted by WSWC and be will presented to its full committee members and participating agencies at their meeting in Washington, D.C. in March 2006.

During a recent courtesy meeting with the WSWC staff in Salt Lake City, the three MSCs recognized the importance of Corps participation and collaboration with WSWC partners on this important initiative.

STUDY PROPOSAL: Working in support of the WSWC action plan and in collaboration with the WSWC, state and federal water resource managers and stakeholders, study tasks would include (but not be limited to) analysis of needs and potential strategies for:

- Study the role of comprehensive state growth policies and its relationship to growing water demands; identify flexible methodologies that would afford better utilization of water resources; evaluate western watershed areas where development is projected to significantly increase and where natural amenities that depend on water resources should be protected as exemplified by Special Area Management Planning encouraged in the Corps' regulatory process; identify and prioritize watersheds that have critical needs and requirements for water supply, water quality, ESA considerations, flood damage reduction, drought, irrigation, conjunctive surface/ subsurface water management, recharge, desalinization and other related treatment technologies, conservation and reuse. Note: throughout the study effort the PDT team will ensure that non-federal plans and decisions with regard to growth management and the protection of local values are respected.

- Local, state and federal water-related infrastructure operation, maintenance and replacement, rehabilitation and new construction; assess the costs/benefits of developing a National Water Infrastructure Registry such as the Dam Safety Inventory and metrics for evaluating such items as: existing condition of western states infrastructure investments - future investments needs - priorities of those needs; identify successful water-related infrastructure partnerships and evaluate organizational opportunities, public and private, for future investments; identify past and present financial mechanisms, including the successful leveraging processes, specific opportunities and obstacles to their use, and the need for new means to facilitate future investments; identify the benefits and beneficiaries of existing water infrastructure as well as leveraging future investments, to include Fed to Fed leveraging of funds and assets; participate in the organizing and development of workshops that would bring stakeholders together to find ways to meet growing western water infrastructure needs.
- Analyze and report on state/federal basic water data gathering activities that can serve as the basis for sound decision making, tradeoff analysis, and identification of key uncertainties to be explored; leveraging all federal and state data gathering and dissemination of water information in real-time; evaluate a compilation of a state-by-state summary of current ground and surface water supplies and anticipated future demands, identifying trends and common themes. This would also include: reliable and sustainable water supplies coupled with reliable and sustainable storage, treatment and distribution infrastructure - water treatment processes, desalinization, re-use technologies, such as very-fine screen filtration and membrane bio reactors - reclaimed wastewater, a most under-utilized water resource west.
- Report upon the potential creation of an integration information system for drought and flood cycles, which would similarly serve as a basis for other water-related planning, preparedness and response activities. Study activities would include: report and analysis of development of an inventory of all flood and storm damage reduction projects, including those in the USACE Rehabilitation and Inspection Program as well as all Federal and non-Federal projects that are not part of the USACE program - analyze and report on state/federal basic water data acquisition activities that can serve as the basis for sound water resource management and analysis;
- Leveraging of all federal and state hydro-meteorological data acquisition and dissemination in real-time;
- Assist in evaluating climate variability on western water resources, and develop recommendations to assist states in preparing for these impacts, including drought preparedness, flood control, and data collection.
- Participate in the development of protocol for improving coordination and cooperation in protecting aquatic species under the ESA within the framework of state water laws.
- Participate in the development of protocol defining the appropriate role of water conservation in reducing demand and achieving sustainable water use within the framework of state water laws.
- Assist, as necessary, and participate with the WSWC in their efforts to plan and participate in a summit to explore the relative merits and obstacles related to programs and technologies that augment existing supplies, including conservation and transfers, retirement of agricultural lands, desalination and other reuse options, weather modification, and surface and groundwater storage. Based on findings of that summit, participate in the development of a strategic plan on a regional level to optimize opportunities; assist, as necessary.
- Assist, as necessary, and participate with the WSWC in their efforts to plan and participate in a workshop in collaboration with relevant federal agencies to evaluate federal and state watershed programs and strategies, examining and reporting on the commitment of resources to the watershed approach and the level of coordination among federal agencies and between federal and state agencies.

RELATIONSHIP TO OTHER PENDING GE WATERSHED PROPOSALS: As mentioned earlier, this study proposal embodies most if not all Corps mission related water resource challenges and priorities for the entire Western United States. Outputs from this effort, shared and integrated with other Corps and other Federal agency watershed studies in the west, will assist WSWC and their members achieve a long-range set of goals, objectives and opportunities critical to implementing sustainable water resource management strategies.

Critical study work is needed at the watershed level to address issues such as: drought in the Colorado River Basin, the Great Basin, Rio Grande Basin, and the Upper Snake River Basin; integrated watershed / water management strategies in the Upper Missouri and Virgin River Basins; population growth coupled with the desire for integrated water management planning needs in the Lower Boise watershed and other rapidly urbanizing areas; environmental impacts to in-stream flows and significant bays and estuaries from potential water management modifications in watersheds leading to the Gulf Coast; and historic Indian water rights claims throughout all three principal watersheds in the West. It will be the PDT members' responsibility to share information gathered from concurrent studies so that all reports appear seamlessly woven together in content, character and determinations.

Additionally, collaborative efforts with our Federal partners, such as BOR, NRCS, EPA, USGS, NOAA and USDA, will bring the federal family to the best, most cost-effective solutions to problems facing our western communities while assuring non-federal interests that all the capabilities offered are a wise and effective use of available federal resources.

Finally, Federal interest determinations made in this "Headwaters" report could hold the possibility of unified local, state and regional support from the Western states.

PROJECT DELIVERY TEAM: The study will be conducted in a collaborative manner between Federal, State, and local agencies and stakeholders and/or legislative and policy development experts. The Corps participants in the PDT will include vertical / horizontal team members with such areas of technical expertise as: integrated water resource / regulatory / infrastructure management and planning; floodplain management and flood damage reduction; environmental; engineering; socio-economics; water reuse and water conservation. Ranging from HQ, the three western MSCs, and their respective Districts, members will be invited to participate and selected based upon the level of technical need or appropriate organization interface. Corps PDT team members at all levels will demonstrate sensitivity and regard for non-federal plans and decisions with regard to growth management and the protection of local values.

All PDT members invited to participate will have existing experience and relationships within the specific basin(s)/regions being addressed. Additional assistance will be sought from IWR, Planning Centers of Expertise, RITs and other components of Corps technical leadership as necessary.

OUTLINE OF CORPS' SUPPORT TO WSWC ACTION PLAN SCHEDULE

- March 27, 2006 – Participation in the WSWC public meeting for purposes of offering comment and discussion on the draft action report during their Washington, D.C. meeting.
- Corps HQ, MSC and/or District participation / preparation support to WSWC as may be required for:

- April WGA Staff Council Meeting – The WSWC shall present its initial findings to Staff Council during their April meeting in Napa.
- April to May 15 – the Council's Executive Committee shall consider the input from the public comment and finalize the draft for submittal to the Governors.
- May/June – WSWC shall participate as requested by Staff Council in their deliberations of the findings, in preparation for the Governors' consideration during the June meeting.
- June Annual Meeting – consideration and adoption of the report by the Governors.
- July WSWC Meeting – The WSWC will develop and adopt a work plan to begin implementation of the recommendations in the report adopted by the Governors.
- July 2006-June 2007 – Implementation of the report's recommendations. This will require the cooperation and collaboration between the states, led by WGA and the WSWC, together with the various stakeholders including federal agencies, water users, environmental groups, industry, Tribes, and local governments.

TRI-MSC STUDY SCHEDULE/BUDGET

Task	Schedule	Budget
Scope Definition in conjunction and coordination with WSWC	March-July 2006	$50,000
Study Proposal Tasks [funding would provide for District (et al) Planning and Technical Support across the three MSC AORs. While Executive support will be called upon for appropriate level of coordination these funds will not be used for Executive Direction and Management (ED&M) spaces or for non-federal participation]	July 2006 – July 2007	$650,000
Draft Report	Sept 2007	$25,000
Final Report	November 2007	$25,000
Total		$750,000

Tri-MSC Project Manager: Joe Dixon, SPL

MSC POC's
SPD: Mark Charlton, Chief of Planning Division; Joe Dixon, SPL; Scott Stoddard, SPK
NWD: Dennis Wagner, Chief Planning Division; Steve Bredthauer; Brayton Willis, NWW
SWD: JoAnn Duman, Chief Planning Division; Kevin Craig; Ron Timmermans

Attachment A: WSWC Project Management Plan
Attachment B: WSWC and WGA Support Letters [Placeholder]